

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for handling a computer database system containing objects that have an extension in a coordinate system representing a multidimensional reality, the coordinate system being divisible into a plurality of defined, multidimensional intervals, ~~each time an object is entered into the database,~~ the method comprising:

determining, each time an object is entered into the database, which multidimensional intervals the object has an extension in;

determining, for each of the intervals, the number of objects having an extension therein;

comparing the determined number of objects with a predetermined threshold value; and

dividing, if the threshold value is exceeded, the interval into at least two smaller intervals of equal dimensions, in order to limit the number of objects related to an extension in any given, defined interval.

2. (Previously Presented) A method as claimed in claim 1, further comprising the step of linking each interval to a set of objects having an extension in the interval.

3. (Previously Presented) A method as claimed in claim 1, further comprising the step of linking each object to a set of intervals within which the object has an extension.

4. (Previously Presented) A method as claimed in claim 1, wherein the coordinate system comprises at least one time dimension.

5. (Previously Presented) A method as claimed in claim 1, wherein the coordinate system comprises at least spatial dimension.

6. (Previously Presented) A method as claimed in claim 1, wherein each division of an interval occurs in only one dimension.

7. (Cancelled)

8. (Cancelled)

9. (Previously Presented) A method as claimed in claim 1, further comprising the step of adjusting the division of intervals when the relation between an object and an extension in the coordinate system is removed.

10. (Previously Presented) A method as claimed in claim 2, further comprising the step of linking each object to a set of intervals within which the object has an extension.

11. (Previously Presented) A method as claimed in claim 2, wherein the coordinate system comprises at least one time dimension.

12. (Previously Presented) A method as claimed in claim 3, wherein the coordinate system comprises at least one time dimension.

13. (Previously Presented) A method as claimed in claim 10, wherein the coordinate system comprises at least one time dimension.

14. (Previously Presented) A method as claimed in claim 2, wherein the coordinate system comprises at least spatial dimension.

15. (Previously Presented) A method as claimed in claim 3, wherein the coordinate system comprises at least spatial dimension.

16. (Previously Presented) A method as claimed in claim 10, wherein the coordinate system comprises at least spatial dimension.

17. (Previously Presented) A method as claimed in claim 5, wherein the coordinate system comprises three spatial dimensions.

18. (Previously Presented) A method as claimed in claim 2, further comprising the step of adjusting the division of intervals when the relation between an object and an extension in the coordinate system is removed.

19. (Previously Presented) A method as claimed in claim 3, further comprising the step of adjusting the division of intervals when the relation between an object and an extension in the coordinate system is removed.

20. (Previously Presented) A method as claimed in claim 10, further comprising the step of adjusting the division of intervals when the relation between an object and an extension in the coordinate system is removed.

21. (New) A method for handling a computer database system containing objects that have an extension in a coordinate system representing a multidimensional reality, the coordinate system being divisible into a plurality of defined, multidimensional intervals, the method comprising:

determining, each time an object is entered into the database, which multidimensional intervals the object has an extension in;

determining, for each of the intervals, the number of objects having an extension therein;

comparing the determined number of objects with a predetermined threshold value in each interval in which the object has an extension; and

dividing each interval for which the threshold value is exceeded into at least two smaller intervals, in order to limit the number of objects related to an extension in any given, defined interval.

22. (New) The method of claim 21, wherein, when the threshold value is exceeded the interval is divided into at least two intervals of equal dimensions.

23. (New) A computer database system containing objects that have an extension in a coordinate system representing a multidimensional reality, the coordinate system being divisible into a plurality of defined, multidimensional intervals,

said database system comprising:

means for determining, each time an object is entered into the database, which multidimensional intervals the object has an extension in;

means for determining, for each of these intervals, the number of objects having an extension therein;

means for comparing said number of objects with a predetermined threshold value in each interval in which the object has an extension; and

means for dividing each interval for which the threshold value is exceeded into at least two smaller intervals, in order to limit the number of objects related to an extension in any given, defined interval.

24. (New) The computer database system of claim 23, wherein, when the threshold value is exceeded the interval is divided into at least two intervals of equal dimensions.